

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled) Please cancel Claim 1.
2. (Canceled) Please cancel Claim 2.
3. (Currently Amended) A polishing method for polishing a film of an object to be polished having a substrate, an insulating film formed in the substrate, interconnection grooves formed in the insulating film, and said film, that is, an interconnection layer, formed inside and outside of the interconnection grooves comprising:
supplying a processing solution over the surface to be polished at least substantially parallel to that surface and removing by polishing the film formed outside of the interconnection grooves by a shear stress due to the processing solution preferentially from projecting portions of said film to flatten the surface;
A polishing method as set forth in claim 1, wherein the object to be polished is made an object having contact holes communicating with the interconnection grooves formed in the insulating film and having the interconnection layer formed buried inside the contact holes as well[.] ;
using a processing solution containing at least a chelating agent as the processing solution;

chelating the surface part of the film by the chelating agent to form a chelate film;
removing by polishing preferentially projecting portions of the chelate film by the
shear stress of the processing solution; and
repeatedly again forming a chelate film on the surface parts of the film exposed at the
projecting portions and removing by polishing preferentially the projecting portions of the
chelate film to flatten the film.

4. (Currently Amended) A polishing method for polishing a film applied to an object
having an insulating film formed over a substrate, interconnection grooves formed in the
insulating film, said film located inside said grooves and above said insulating film, said
method comprising:

supplying a processing solution over the surface to be polished at least substantially
parallel to that surface and removing by polishing projecting portions of film formed outside
of the interconnection grooves by a shear stress due to the application of the processing
solution

using a wherein said processing solution containing contains at least a chelating agent
as the processing solution;

chelating the surface part of the film by the chelating agent to form a chelate film;
removing by polishing preferentially projecting portions of the chelate film by the
shear stress of the application of the processing solution; and

repeatedly again forming a chelate film on the surface parts of the film exposed at the
projecting portions and removing by polishing preferentially the projecting portions of the
chelate film to flatten the film.

5. (Original) A polishing method as set forth in claim 4, further comprising using a polishing solution further including an oxidizing agent as said polishing solution and oxidizing the surface part of the film by said oxidizing agent and chelating the obtained oxide by said chelating agent to form a chelate film.
6. (Original) A polishing method as set forth in claim 4, further comprising using a polishing solution further including a surface-active agent as said polishing solution and removing said chelate as micelles covered by said surface-active agent when removing by polishing ~~from~~ projecting portions of said chelate film by the shear stress by said processing solution.
7. (Currently Amended) A polishing method ~~for an object having a film on a surface to be polished, as set forth in claim 4, further~~ comprising: supplying an electrolytic solution at least between said surface to be polished and a cathode member arranged facing said surface and substantially parallel to said surface while supplying voltage with the cathode member as a cathode and said film as an anode to remove ~~by polishing preferentially~~ projecting portions of said film by the shear stress of the applied electrolytic solution to flatten the surface.
8. (Original) A polishing method as set forth in claim 7, wherein the film comprises a copper film.
9. (Currently Amended) A polishing method as set forth in claim 7, further comprising

using as the object to be polished an object having a substrate, an insulating film formed ~~on~~ over said substrate, interconnection grooves formed ~~on~~ in the insulating film, and ~~said film, that is,~~ an interconnection layer~~[[,]]~~ buried inside the interconnection grooves and formed over the ~~entire~~ surface outside the interconnection grooves, and removing by polishing the ~~film, that is,~~ interconnection layer, formed outside of the interconnection grooves to flatten the surface.

10. (Currently Amended) A polishing method as set forth in claim 9, wherein the object to be polished is ~~made~~ an object having contact holes communicating with the interconnection grooves formed in the insulating film and having ~~the~~ an interconnection layer formed ~~buried~~ inside the contact holes ~~as well~~.

11. (Currently Amended) ~~A polishing method as set forth in claim 7, A polishing method for an object having a film on a surface to be polished, comprising:~~
~~supplying an electrolytic solution at least between said surface to be polished and a cathode member arranged facing said surface and substantially parallel to said surface while supplying voltage with the cathode member as a cathode and said film as an anode to remove by projecting portions of said film by the shear stress of the applied electrolytic solution to flatten the surface, said method further comprising:~~

using an electrolytic solution containing at least a chelating agent as the electrolytic solution;

supplying a voltage with said cathode member as a cathode and said film as an anode to oxidize the surface of the film by anodic oxidation;

chelating the surface part of the oxidized film by the chelating agent to form a chelate film;

removing ~~by polishing preferentially~~ projecting portions of the chelate film by the shear stress of the application of the electrolytic solution; and

repeatedly ~~again~~ forming a chelate film on the surface parts of the film exposed at the projecting portions and removing by polishing ~~preferentially~~ the projecting portions of the chelate film to flatten the interconnection layer.

12. (Currently Amended) A polishing method as set forth in claim 11, further comprising using an electrolytic solution further including a surface-active agent as said electrolytic solution and

removing said chelate as micelles covered by said surface-active agent when removing by polishing ~~from~~ projecting portions of said chelate film by the shear stress by said electrolytic solution.

Claims 13 – 35 (Canceled) These claims were previously canceled.

Please add the following new claims:

36. (New) A polishing method as set forth in claim 11, wherein the object to be polished is an object having contact holes communicating with the interconnection grooves formed in the insulating film and having an interconnection layer formed buried inside the contact holes as well.

37. (New) A polishing method as set forth in claim 11 wherein the film comprises a copper film.

38. (New) A polishing method as set forth in claim 11, further comprising
using as the object to be polished an object having a substrate, an insulating film
formed over said substrate, interconnection grooves formed in the insulating film, and said
film formed inside said grooves and above said insulating film, said method comprising:
removing by polishing the film portion formed outside of the interconnection grooves
to flatten the surface.

39. (New) A polishing method as set forth in claim 15, wherein the object to be polished
further has contact holes communicating with the interconnection grooves formed in the
insulating film and having the interconnection layer formed buried inside the contact holes as
well.

40. (New) A method of polishing comprising the steps of:
providing a device including an insulating film having interconnection grooves
formed therein and a conductive film formed over the insulating film; and
applying a polishing fluid over the film and directing the fluid in a direction
substantially parallel to a surface of the film via a channel formed between the film and a
structure substantially parallel to the film.

41. (New) The method of polishing of claim 40, wherein the structure includes a cathode.